Campbell Tract Facility Master Plan

EA No.: AK-040-04-EA-013

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BUREAU OF LAND MANAGEMENT
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ENVIRONMENTAL ASSESSMENT
EA No.: AK-040-04-EA-013

Applicant: Bureau of Land Management

Type of Action: Master Plan

Location: Campbell Tract

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List of Acronyms

ACEC	Area of Critical Environmental Concern
AFO	Anchorage Field Office
ANCSA	Alaska Native Claims Settlement Act
ANILCA	Alaska National Interest Lands Conservation Act
BLM	Bureau of Land Management
CCSC	Campbell Creek Science Center
CFR	Code of Federal Regulations
CT	Campbell Tract
CTF	Campbell Tract Facility
EO	Executive Order
FLPMA	Federal Land Policy and Management Act
FNBP	Far North Bicentennial Park
INHT	Iditarod National Historic Trail
MFP	Management Framework Plan
MOA	Municipality of Anchorage
PILT	Payment in Lieu of Taxes
PLO	Public Land Order
SRMA	Special Recreation Management Area
USC	United States Code
USFS	U.S. Forest Service
USGS	U.S. Geological Survey

I. INTRODUCTION

History

During World War II, the federal government set aside 7,680 acres of land southeast of Anchorage for the war effort. It was commonly known as the "Campbell Tract (CT)," and was a part of the Fort Richardson Army Base.

In 1964, Anchorage suffered a devastating earthquake. After the quake, there was a shortage of useable land in Anchorage. The federal government had several useable parcels, including a prime parcel in downtown Anchorage used by the Bureau of Land Management (BLM) as an administrative site. The City of Anchorage (City) needed the land for reconstruction and the BLM agreed to make the land available once it found a new site for its operations.

The BLM asked the military for permission to move its administrative facility to the CT. The military consented and in 1965, after spending over two million dollars on new facilities, the BLM moved its administrative, fire control and warehouse operations to the CT. The military also granted the BLM permission to use the 5,000 foot gravel airstrip located on the CT.

In 1971, the Department of Defense determined it no longer needed the CT for military purposes. By that time, 2,665 acres had been transferred out of federal ownership. The State of Alaska (State), the City and the BLM engaged in negotiations to divide the remaining CT land. The negotiations were finalized in a January 2, 1976, amendment to the Alaska Native Claims Settlement Act (ANCSA), which directed the Secretary of the Interior to convey the remaining 5,015 acres of the CT to the State except for:

> one compact unit of land, which he [the Secretary] determines, after consultation with the State of Alaska, is actually needed by the BLM for its present operations. *Provided*, that in no event shall the unit of land so excepted exceed 1,000 acres in size.
>
> 43 U.S.C. 1611 and P.L. 94-204(d)(2), January 2, 1976.

On February 11, 1982, Public Land Order (PLO) 6127 set aside 730 acres of the CT for use by the BLM as an administrative site (Figure 1). The remaining 4,285 acres were transferred to the State and subsequently to the Municipality of Anchorage (MOA). (The City of Anchorage and the Greater Anchorage Area Borough were unified in 1975 to become the MOA). PLO 6127 was renewed in 2002 and continued the withdrawal of the 730 acre CT until February 11, 2022.

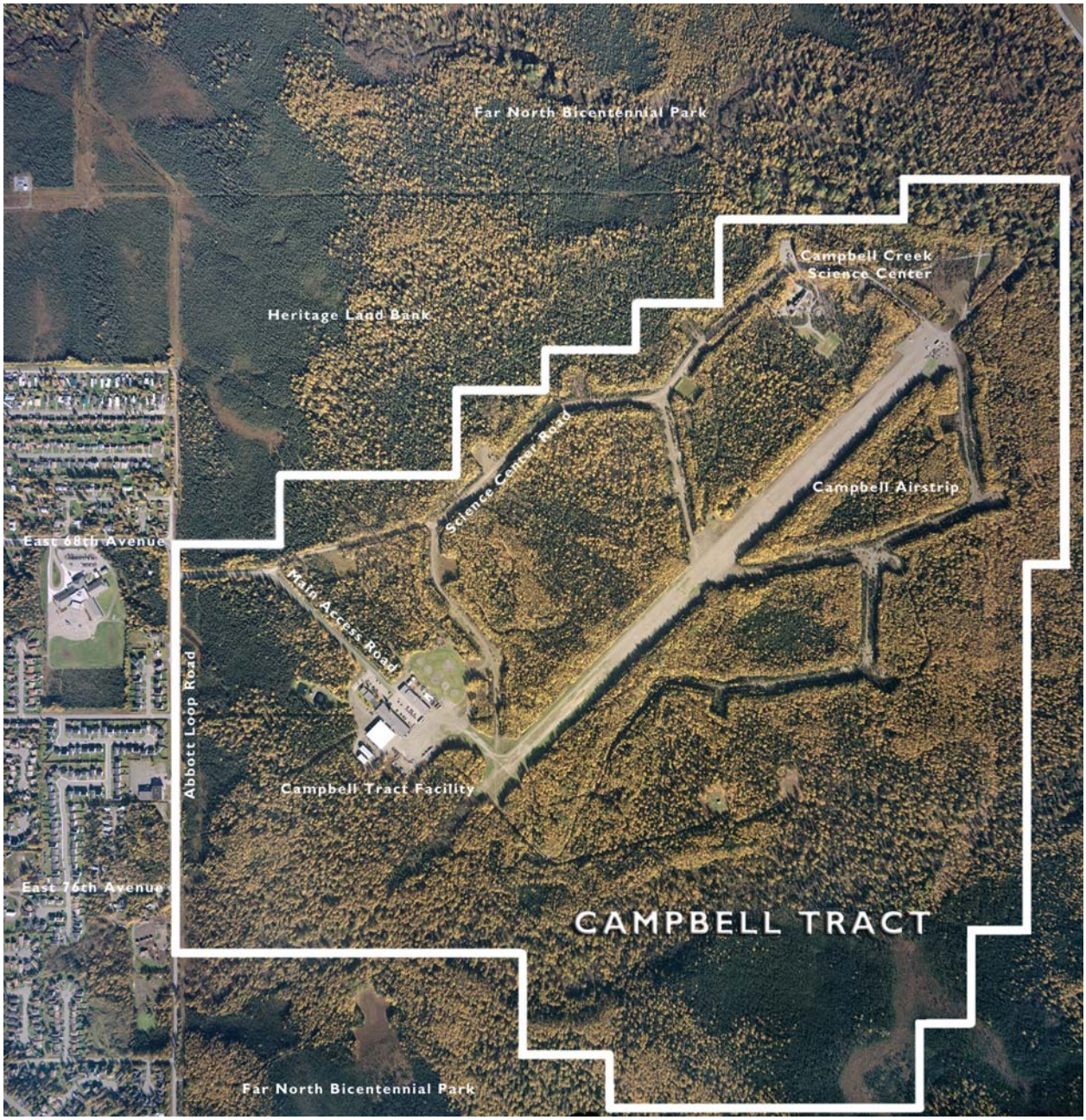

Figure 1 – Map of Campbell Tract Withdrawal

Current Use

The Campbell Tract Facility (CTF) is important as an administrative site for management of public lands in Alaska. The CTF administrative area is located on the southwest portion of the CT (Figure 2). It includes the following:

1. Office Facilities

   The administrative area complex at the CTF provides office space for over 130 employees and work areas for 16 maintenance and warehouse employees. The BLM components housed at the CT include:

   a. Anchorage Field Office (AFO) - The AFO manages 16 million acres of federal surface estate in southern Alaska. The office oversees natural resources and realty programs. The AFO has statewide responsibilities for the forestry and volunteer programs, and management of the Iditarod National Historic Trail (INHT).

   b. Branch of Energy - The Branch oversees energy and mineral development statewide. It has responsibilities for oil and gas operations and mineral assessments.

   c. Branch of Finance and Quality Management (Procurement) - The Branch provides procurement and administrative support statewide.

   d. Branch of Facilities Management - The Branch provides engineering services, property management and facility management statewide.

   e. Branch of Field Surveys - The Branch surveys land throughout the State in support of the conveyance programs that convey federal land to the State of Alaska, Native corporations and Native allottees.

2. Maintenance Facilities

   Shop facilities are on site to repair and maintain pumps, saws, and outboard motors, as well as heavy equipment. Heavy equipment to maintain the gravel roads and remove snow is kept on site. The radio shop provides space to maintain the radio equipment used by the BLM in southern Alaska. The radio shop is also staffed by U.S. Forest Service (USFS) personnel who maintain the USFS radio equipment.

Figure 2 - Map of Existing Campbell Tract Facility

3. Warehouse Areas
The warehouse is the receiving point for all the BLM shipments in Anchorage. Three warehouse buildings totaling 26,450 square feet of storage space are located on site. Equipment needed for field operations is stored and maintained on site. Warehouse space is provided for three other agencies. Outdoor fenced areas provide the BLM and other agencies additional storage space.

   a. Warehouse Tenants - Other organizations that use the facility include:

      The National Park Service stores equipment outdoors in a fenced compound.

      The USFS stores goods and equipment inside the warehouse and the outdoor compounds.

      The Disaster Medical Assistance Team, a Public Health Service function, stores a Hercules C-130 aircraft load of medical supplies in the warehouse, ready for use in case of disaster.

4. Remote Fueling Operation and Maintenance
Equipment used to set up and maintain environmentally sound remote fueling sites is maintained at the CT. Remote fueling is a unique service provided by the BLM to all the Departments of the Interior agencies, the USFS, and on occasion State agencies. In addition, there are facilities for processing and disposing of contaminated fuel located on the CT.

5. Heliport
There is a helicopter base within the administrative area with six landing pads. The base provides training for the Department of the Interior agencies and support for the BLM field and fire operations.

In addition to the offices and facilities located within the administrative area, the staff at the facility direct or support the following functions located on the CT:

1. Campbell Creek Science Center (CCSC)
The CCSC is a part of the AFO. The CCSC is utilized by local school children, teachers, parents, individuals, clubs and organizations for classes, meetings and conferences on subjects related to natural resources. It is operated in partnership with the Anchorage School District and other partners.

2. Radio Communication Sites

a. BLM Communication Site - The BLM's ground to air radio communication transmitters and receivers are located at the south end of the CT. The transmitters and receivers provide communications with aircraft using the airstrip and heliport. The BLM's high frequency radio and telephone links to the field are transmitted and received at this site.

b. Multi Agency Communication Site – The CT is the site of the only meteor burst communication, master station in the State of Alaska. The system is currently used by the BLM, the Army Corps of Engineers, the Natural Resources Conservation Service, and the National Weather Service. In addition to providing the BLM with statewide communication capability, remote and unmanned sensors monitor flood areas and avalanche zones throughout the State and transmit the data to the station.

3. CT Airstrip
The 5,000 foot gravel runway at the CT is closed to private aircraft use but is used by the BLM and other public agencies. In the event of a catastrophic earthquake or any other disaster, the CT runway could handle medium sized disaster relief aircraft up to the Hercules C-130.

4. Calibration Monuments
The gravel underlying the CT ensures a very stable location for calibration of geologic and geomantic instruments. Two monuments along the runway serve as accurate points for public and private surveyors to calibrate survey instruments. Likewise, a U.S. Geological Survey (USGS) Gravity Station Reference Point, located in the basement under the offices, is used to calibrate instruments and to measure minute changes in the Earth's gravity.

5. Recreation Management
The CT is designated as a Special Recreation Management Area (SRMA). Recreation management is guided by the "Management Plan for Public Use and Resource Management on the BLM Campbell Tract." The BLM has developed and maintains 11.2 miles of trails and three bridges on the CT.

A. Purpose and Need for the Proposed Action
The CTF is essential to the mission of the BLM in Alaska. The CTF has served as the administrative site for the BLM's AFO and portions of the BLM's Alaska

State Office since 1965. Many of the buildings at the site are more than 39 years old and do not meet seismic requirements, capacity or functional needs, and may not be cost effective to remodel or maintain. In order to meet current and future needs to help BLM staff manage public lands across Alaska, the facility needs to be updated. The development and implementation of a master plan would assure the process is conducted in an efficient and cost effective manner. The CTF Master Plan option selected will set forth the plan to develop, replace, renovate and maintain the administrative area facilities on the CTF.

B. Conformance With Land Use Plan

The CT is within the geographic boundary of the Alaska Southcentral Planning Area Management Framework Plan (MFP), dated March 1980. Although the subject of the administrative area facilities was not specifically addressed in the MFP, the Proposed Action is consistent with the rationale in Lands Activity Objective L-1.1, "When the use of the land is in the public interest, the Bureau should retain ownership."

C. Relationship to Statutes, Regulations, Policies, Plans or Other Environmental Analyses

The Proposed Action and alternatives are subject to the Federal Land Policy and Management Act (FLPMA) and the regulations found at 43 Code of Federal Regulations (CFR) 2300, Land Withdrawals. Under the FLPMA, the Secretary of the Interior may, on his own motion, withdraw less than 5,000 acres of land for administrative use. 43 United States Code (U.S.C.) 1714(d). The Secretary may only extend a withdrawal for the purpose for which the withdrawal was first made and then only for a period no longer than the length of the original withdrawal. 43 U.S.C. 1714(f). FLPMA also allows the Secretary to withdraw public lands for use, occupancy and development by federal departments and agencies. 43 U.S.C. 1732(b).

Development in federal wetland areas requires compliance with Executive Order (E.O.) number 11990 - Protection of Wetlands. The E.O. requires the agency to avoid construction located in wetlands unless the agency finds there is no practicable alternative to such construction and the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use.

The management of the CT is directed by the plan titled "A Management Plan for Public Use and Resource Management on the Bureau of Land Management Campbell Tract Facility" completed in June 1988. The primary objective of the plan is the continued management of the CT for BLM administrative purposes. The plan designated a Central Administrative Zone which consists of the office buildings, shop buildings and warehouse complex; airstrip and access roads; and

communication sites. In this zone, public use is restricted other than public access for BLM related business purposes. Secondary objectives provide for public uses that are compatible with operation of the administrative facility. These include recreation use, protection and interpretation of resource values and community involvement in the development, management and maintenance of the CT.

II. PROPOSED ACTION AND ALTERNATIVES

The Proposed Action and alternatives describe a range of actions that could be carried out through implementation of a CTF Master Plan. The proposed new administration building would have the same basic design for all development alternatives but the site locations vary. Likewise, the numbers of employees at the facility for all development alternatives would increase from approximately 148 to 175 but would vary depending on the number of vacancies and office location reassignments. The different site alternatives have different development and demolition requirements. Many of the developments in these alternatives would be phased over time and subject to the availability of funding. This analysis is based on the overall development of the site plan alternatives.

A. Actions Common to the Proposed Action and Alternatives

These actions may be required for all alternatives excluding the No Action Alternative. Some actions may be required by other government entities or are necessary to maintain the functionality of the administrative complex.

CTF Entrance Road - The proposed Abbott Loop Road - Bragraw Road extension would upgrade Abbott Loop Road in front of the CT to multiple lanes, either three or four, with turning lanes. It is possible that a light signal may be placed at the intersection of East 68th Avenue and Abbott Loop Road. As a result of the upgrade, the BLM may be required to relocate the entrance road to align with East 68th Avenue. Because of the tentative status, the relocation of the entrance road is not a part of the CTF Master Plan, but is analyzed along with the CTF Master Plan because of the close relationship of the projects.

The new entrance alignment would extend from the intersection of East 68th Avenue and Abbott Loop Road easterly and intersect the existing entrance road near the Smoke Jumper Loop trailhead parking area (Figure 3). There are two concepts for the road, only varying in where they would connect with the existing access road. Concept A intersects the main access road just west of the existing Smoke Jumper Loop Trail parking area. The new portion of the entrance road for this concept would require clearing of an area 500 feet long and 50 feet wide, approximately 25,000 square feet of forest. Concept B intersects the main access road just east of the existing Smoke Jumper Loop Trail parking area. The new portion of the entrance road for this concept would require clearing of approximately 40,000 square feet. It would include an area 700 feet long and 50 feet wide, approximately 35,000 square feet of forest, plus an additional 5,000 square feet of forest for relocation of the parking area.

Concept A

Concept B

Figure 3 – Map of New Entrance Road Alignments

Water Utilities – The existing water sources for the CTF are wells located on site. It is desirable to connect with the municipal water utility as a means of providing greater fire protection and reducing operational costs.

The connection would require the installation of 2,600 feet of 12 inch iron pipe buried to a depth of 10 feet from the CTF administration site to the 16 inch water main at the intersection of Abbott Loop Road and East 68th Avenue. The pipe would be located in the barrow area alongside the south side of the CTF entrance road (Figure 4). Trench width would vary from 20 to 30 feet at the top based a 1:1 side slope on the trench.

Sewer Utilities – The CTF has two sewage treatment lagoons where on site wastewater is treated. It is desirable to connect to the municipal sewer utility to reduce operational costs and improve service. It would require 2,940 feet of 8 inch iron pipe buried at a depth of 9 feet, extending from the CTF administration site to the 8 inch sewer main at the intersection of Abbott Loop Road and East 67th Avenue. The pipe would be located in the barrow area on the north side of the CTF entrance road and the east side of Abbott Loop Road (Figure 4). Trench width would vary from 20 to 30 feet at the top based on a 1:1 side slope on the trench.

Power Utilities – Electric service would be provided by the existing overhead power line from Abbott Loop Road to the back of the CTF facility and from there it would be routed underground to the new building sites. An option would be to bring electric power underground from the existing underground power cable to the CCSC along the entrance road to the proposed building sites. Gas and phone service would remain in the existing overhead power line corridor and likewise be routed underground to the new building sites. It is also likely that the gas lines from the proposed building sites would be connected to the gas line going to the CCSC in order to form a continuous loop. Any new lines would be buried to a depth of up to 4 feet. Lengths would vary depending on the connection point but would be from 1,500 to 3,000 feet long. These utilities would be located in the existing corridors, in the developed CTF administrative area and in the barrow area alongside the CTF entrance road. All lines connect to the main utility lines along Abbott Loop Road.

Project Phasing – All alternatives, except the No Action Alternative, would be phased over time to allow time for construction and acquisition of funding. It is likely that necessary funding would not be received according to the schedule, particularly in the out years, and construction of some phases would be delayed.

Figure 4 - Map of Utilities

Proposed phasing of the major project elements include:

Construct new administration building and parking lot
Design FY05 - FY06
Construction FY07 - FY08

Extend public utilities (water, sewer and others) to new administration building
Design FY05 - FY06
Construction FY06 - FY07

Connect site utilities to other CTF buildings and decommission wells and sewage treatment ponds
Design FY05 - FY06
Construction FY07-FY08

Construct new facility maintenance shop, yard and fuel pad
Design FY08
Construction FY09

Retrofit southeast administration building to warehouse use, remove ATCO storage buildings and install new security fencing
Design FY09
Construction FY10

Demolish existing facility maintenance shops and yard
Demolition FY10

B. Proposed Action - Meadows Site Plan

The Proposed Action is to develop and implement a master plan for the CTF utilizing the Meadows Site Plan. The site plan is shown in Figure 5 and depicts the location of the improvements. The Proposed Action includes the actions described in Section II.A. Actions Common to the Proposed Action and to all Alternatives, and the developments described below. The estimated cost of full development, including inflation, would be from 19 to 24 million dollars.

Construct a two story administrative building, approximately 42,000 square feet in size. Design the building to blend into the site and orient to take advantage of daylight and mountain views.

Construct a parking lot near the administration building with approximately 173 parking spaces for visitors (38) and staff (135).

Figure 5 - Map of Meadows Site Plan (Proposed Action)

Remove approximately 217,500 square feet of forested land for placement of the building and parking areas. Mitigate forest removal by restoring approximately 218,500 square feet of cleared land to forest. Mitigation areas include the sewage treatment site, old aircraft parking pads, and areas near the helipads. Landscape around the building and the parking lots with native plant materials.

Relocate and construct maintenance shop and fuel pad near the warehouse and aircraft parking apron. Demolish existing maintenance shop and fuel pad after new shop is built.

Renovate the southeast administration building to warehouse use after construction of the new administration building. Remove ATCO buildings.

Fence the warehouse and shop areas to improve public safety and site security.

Maintain the helipads and aircraft apron in the present location.

C. Alternative #1 - No Action

The No Action Alternative is to continue the use of the administrative area as it presently exists (Figure 6). Maintenance and updating of the existing facilities would continue but no major changes would occur that require changes to the site plan, the demolition and replacement of existing buildings or the construction of new buildings. This alternative includes the following:

Upgrade the existing buildings to meet seismic and building code requirements.

Remodel and retrofit the existing buildings to meet administrative office, warehouse, shop and storage needs.

Conduct normal maintenance on buildings, parking areas, storage areas, helipads, aircraft apron, roads and utilities.

D. Alternative #2 - Gateway Site Plan

This alternative is to develop and implement a master plan for the CTF utilizing the Gateway Site Plan (Figure 7). This alternative includes the actions described in Section II.A. Actions Common to the Proposed Action and to all Alternatives, and the developments described below.

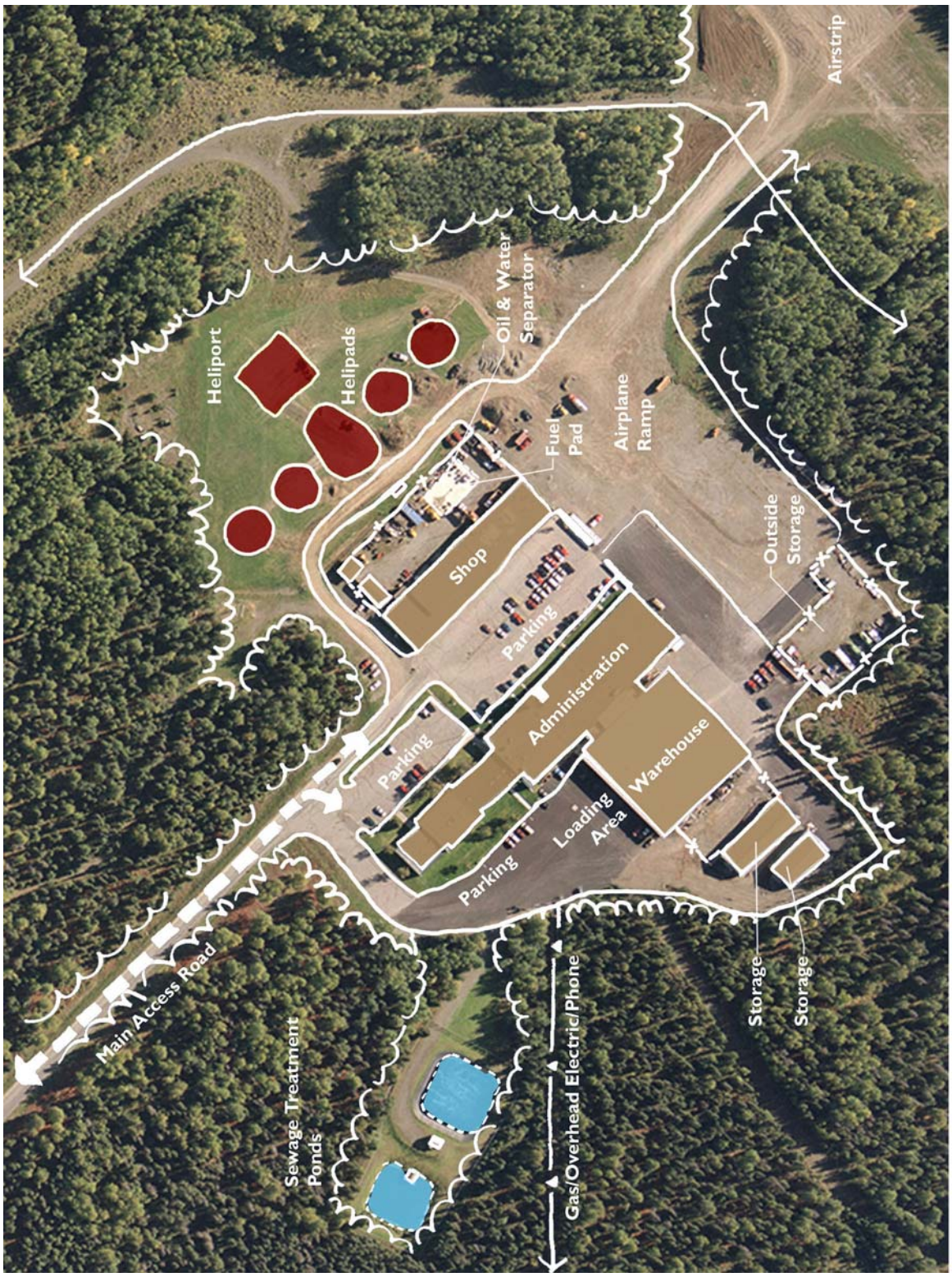

Figure 6 - Map of Existing Area (No Action Alternative #1)

Figure 7 - Map of Gateway Site Plan (Alternative #2)

The estimated cost of full development, including inflation, would be from 20 to 26 million dollars.

Construct a two story administrative building, approximately 42,000 square feet in size. Design the building to blend into the site and orient to take advantage of daylight and forest views.

Construct a parking lot near the administration building with approximately 194 parking spaces for visitors (54) and staff (140).

Remove approximately 198,500 square feet of forested land for placement of building and parking areas. Mitigate forest removal by restoring approximately 200,000 square feet of cleared land to forest. Mitigation areas include the sewage treatment site, old aircraft parking pads, and areas near the helipads. Landscape around building and parking lots with native plant materials.

Relocate and construct the maintenance shop and fuel pad near the back of the warehouse and aircraft parking apron. Demolish the existing maintenance shop and fuel pad after a new shop is built.

Renovate the southeast administration building to warehouse use after construction of the new administration building. Remove the ATCO buildings.

Fence the warehouse and shop areas to improve public safety and site security.

Maintain the helipads and aircraft apron in the present location.

E. Alternative # 3 - Courtyard Site Plan

This alternative is to develop and implement a master plan for the CTF utilizing the Courtyard Site Plan (Figure 8). This alternative includes the actions described in Section II.A. Actions Common to the Proposed Action and to all Alternatives, and the developments described below.

The estimated cost of full development, including inflation, would be from 19 to 24 million dollars.

Construct a two story administrative building, approximately 42,000 square feet in size. Design the building to blend into site and orient to take advantage of daylight and mountain views.

Figure 8 - Map of Courtyard Site Plan (Alternative #3)

Construct a parking lot near the administration building with approximately 183 parking spaces for visitors (54) and staff (129).

Remove approximately 105,000 square feet of forested land for placement of the building and parking areas. Mitigate forest removal by restoring approximately 113,000 square feet of cleared land to forest. Mitigation areas include the sewage treatment site, old aircraft parking pads, and areas near the helipads. Landscape around the building and parking lots with native plant materials.

Relocate and construct a maintenance shop in the parking lot area of the southeast administration building. Demolish the existing maintenance shop after a new shop is built.

Construct an addition to the remaining northwest administration building to house an upgraded HVAC system (air/heat handling system).

Demolish and remove the southeast administration building and convert to a shop yard after construction of the new administration building.

Expand/construct an addition to the existing warehouse, remove ATCO buildings. Relocate the fuel pad near the back of the warehouse and the aircraft parking apron. Demolish the existing fuel pad.

Fence the warehouse and shop areas to improve public safety and site security.

Remove and relocate two of the helipads to allow room for the administration building.

Maintain the aircraft apron in its current location.

III. AFFECTED ENVIRONMENT

A. Land Status

The CTF administrative area is located within the SW¼ of Section 3, T. 12 N., R. 3 W., Seward Meridian, Alaska. This land is part of the 730 acres of public land withdrawn for BLM administrative purposes by the renewal of PLO 6127 in 2002. The withdrawal is subject to renewal in 2022.

B. Critical Elements

The following Critical Elements of the human environment are either not present or would not be affected by the Proposed Action or the alternatives:

Areas of Critical Environmental Concern (ACECs)
Environmental Justice
Farm Lands (prime or unique)
Floodplains
Native American Religious Concerns
Wild and Scenic Rivers
Wilderness

The following Critical Elements of the human environment are present and would be affected by the Proposed Action or the alternatives:

1. Air Quality

The area near and around the CTF is located within attainment areas for all criteria pollutants. Dust and other particulates are generated, particularly in the spring and during dry seasons, from traffic in the general area and specifically from traffic on the road to the CCSC.

2. Cultural Resources

Prehistoric Resources - No prehistoric resources have been identified on the CT. It lies within the territory claimed by the historic Dena'ina, an Athabaskan speaking people. Only spotty evidence of human use has been found indicating occupation prior to their entering the Cook Inlet area. The oldest site in the area dates to approximately 8,000-10,000 and 4,500 years ago at Beluga Point.

World War II Resources - Construction for Fort Richardson was authorized in June 1940. In June 1942, 50 men from the 138th Infantry Regiment arrived at the newly constructed Campbell Airfield. Early construction consisted mainly of 10' x 16' sod huts

built from locally available materials. During this early period at the airfield, there were approximately 15 of these huts plus a mess hall, kitchen, guard huts and posts located at the northeast end of the airstrip. In December of 1942, another camp was constructed on the south bank of Campbell Creek which consisted of Quonset huts and more traditional building materials. Elsewhere on the CT small pits have been located on the hillside overlooking the 1943 garrison camp. It appears most resources were located at the north east end of the airstrip and not in the area occupied by the CTF administrative facility.

Post World War II - Several burn pit/can dumps have been identified and seem to be associated with the airstrip and some of the revetments. Preliminary observations of the material in these can dumps appear to date exclusively to the 1970's when the CT was used as a center for wild fire operations, however, older material may lay deeper.

3. Invasive, Non-Native Species

There are 38 species of non-native plant species known to exist in Anchorage that are listed in the Alaska Exotic Plants Information Clearing House list. Several of these species likely occur in the administrative area. These include Buckhorn Plantain *Plantago sp*., Yellow Toadflax *Linaria vulgaris*, Blue Burr Stickseed *Lappula echinatat*, Annual bluegrass P*oa annua*, Leafy Spurge *Euphorbia esula*, Tufted Vetch *Vicia cracca* and possibly other species. These species are generally found in disturbed areas and often colonize areas around buildings, roads, parking pads and trails.

The Amber-marked Birch Leaf Miner *Profenusa thomsoni*, a small insect introduced from Europe, in the Anchorage area since the mid 1990s, has infected many of the birch trees in the entire Anchorage Bowl, including the CT. It causes defoliation of some trees and can kill trees that are weak or otherwise stressed.

4. Subsistence

The CT lands are Federal Public Land as defined in the Alaska National Interest Lands Conservation Act (ANILCA), Section 102 and fall under the authority of the Federal Subsistence Board and the Subsistence Regulations for the Harvest of Fish and Wildlife on Federal Public Lands in Alaska. The CT lies within the Anchorage Management Unit of Game Management Unit 14C

which under the current Subsistence Regulations is closed to the taking of wildlife under both State (hunting and trapping) and Federal Subsistence Regulations. Further, the taking of wildlife on the CT is limited by Supplemental Rules issued on November 20, 1998 under 43 CFR 8365.1-6 that close the CT to the use of firearms, archery equipment, traps or snares. The CT has no documented consistent use by rural Alaskans of fish or game and no knowledge of such use has become available since the inception of the Federal Subsistence Program or the issuance of the Supplementary Rules.

5. Threatened and Endangered (T&E) Species
There are no known Federal T&E animal or plant species found at the CT.

6. Water Quality (Surface/Ground)
Surface – The administrative area is located in the Campbell Creek drainage basin. Surface water runoff from the general CTF administrative area infiltrates into the ground before reaching any waterways. No surface water flows from the developed administration site into any of the Campbell Creek branches but may recharge ground water which does eventually reach the Campbell Creek drainage complex. Testing data from the sewage lagoon and nearby seeps show no releases of monitored parameters from the treatment system.

Ground – Ground water quality on the CT is good based on data from wells that supply the CCSC and the administrative area facility. Ground water depth is approximately 25 to 35 feet but some areas west of the sewage lagoon have high or perched water layers at a much shallower depth. There is also a high or perched water layer in the wetlands at the end of East 68th Avenue and near the CTF entrance road.

7. Wastes (Hazardous/Solid)
There are no known contaminated sites in the administrative area. It is possible that some ordnance or waste from past military activities could have been buried somewhere on site. Use by BLM the last 39 plus years has involved vehicle maintenance and fueling activities that generated some waste, but these have been disposed of using approved methods. The wastewater treatment system onsite includes a secondary treatment lagoon and settling basin, and is not connected to any industrial wastewater discharge points.

8. Wetlands/Riparian Zones

The MOA published its wetlands plan in 1996. The plan designates and provides data on wetlands within the MOA. Lands along Campbell Creek and in the general area are designated Class A and are considered to have the highest resource value among MOA wetlands. This is based on their hydrologic, habitat and social functions, and their importance to the health of the stream systems which they feed.

Wetlands and riparian areas are distributed throughout the CT. The land likely to be affected by development of the alternate access road or the CTF Master Plan has only limited amounts of wetland/riparian zones.

At the access road realignment site, there is a black spruce bog/spruce moss forest wetland site beginning at the end of East 68th Avenue that extends 300 to 500 feet easterly into the CT. There is no standing water but a high water table restricts vegetation to species that can tolerate hydric soils. This area is relatively undisturbed beyond the road and utility corridors along Abbott Loop Road.

The area west of the CTF sewage lagoons is wetland and portions would be classified as a black spruce bog or spruce moss forest depending on the classification system used. This area was disturbed years ago either before or when the sewage treatment system was constructed. The surface is no longer wet and currently supports grass and herbaceous vegetation over a high water table.

C. Minerals

The federal lands on the CT are withdrawn from settlement, sale, location, or entry, under the general land laws, including the mining laws under 30 U.S.C. Chapter 2. There are no mining claims or mineral leases on the CT.

D. Recreation

Recreation is an important use on the CT. However, in the 1988 Management Plan, recreation use of the administrative zone is generally prohibited except for limited exemptions for non-motorized trail use on specific trails and access roads.

The proximity of the CT to urban Anchorage places demands on the site from a variety of users. Most recreation use occurs on the trails that were developed on old military tank trails and airplane taxiways. There are approximately 11.2 miles of developed trails on the CT. Most of these trails link to other trails on the adjoining Far North Bicentennial Park (FNBP). Direct CT access for recreation use occurs from the parking areas at Mile 1.1 Trailhead off the Campbell Airstrip Road and Smoke Jumper Trailhead off the CT entrance road. Trail maintenance and signing is a cooperative effort between the user groups, the BLM and the MOA's Parks and Recreation Division.

The CT serves as the outdoor classroom for the CCSC. There are approximately 25,000 user days at the CCSC and outdoor classroom.

E. Socio-economics

Anchorage's population has tripled since Statehood, from 83,000 in 1960 to more than 269,000 today. As the State's chief trade, transportation, and distribution center, Anchorage's prosperity is tied to national and international markets for oil, gas, minerals, timber, and seafood. In 2000, per capita personal income was $34,950.

The use and management of the CT facility contributes directly to the economy of Anchorage. There are 148 employees at the CTF with the number varying depending on the number of vacancies and office location reassignments. Annual income of staff adds over seven million dollars to the local economy. Figures for expenditures for goods and services spent in the community are not available, but amount to several million dollars annually. Management of the CT recreation and education programs provides over $500,000 worth of value annually to the community. The MOA receives annual Payment in Lieu of Taxes (PILT) for the 730 acre CT which totaled $69,900 in 2000 and increases each year as land values increase.

F. Soils

The soils on the CT are typically gravelly, well drained glacial drift with an overlying mantle of silty loess about 15 to 18 inches thick. These soils typically have a thin, gray silt upper layer over reddish brown to yellowish brown layers about 6 to 12 inches thick. The lower part of these layers and the substratum consist of very gravelly sand or sandy loam that contains many stones and boulders. In a few places these soils are less well drained and form wet depressions, sometimes filled with water.

Soil maps indicate the area around the administrative complex has well drained soils. The exception would be just west of the sewage lagoon and the area east of the end of East 68th Avenue where hydric soils are present.

G. Vegetation

The native vegetation on the CT is a result of the maritime subarctic climate, soil types, and previous disturbance. Plant communities that are typical of southcentral Alaska and the subarctic environment are found on the CT. The vegetation mosaic is the result of human activities, primarily military use during the 1940's and 1950's, that disturbed existing native plant communities. Abandoned, disturbed areas are gradually following a successional pattern back to climax forest conditions.

Most of the area around the existing administrative complex is developed or disturbed and to a lesser degree around the alternative sites. In these upland areas, the dominate vegetation type is spruce birch forest. This consists of white spruce and paper birch as the dominate species with some aspen and black spruce. A tall under story of willow and alder are present. Labrador tea, low bush cranberry, dwarf dogwood and bluejoint grass are present in the low understory. A wide variety of forbs, mosses and lichens are also present.

A high percentage of the mature white spruce trees on the CT have been killed by spruce bark beetles. Many trees greater than eight inches in diameter will eventually die as a result of beetle attacks. As these trees fall, less susceptible younger spruce and birch will tend to replace the spruce. Mixed spruce/hardwood stands will tend to become dominated by birch or other hardwoods.

In wetland areas with poorly drained soils, near the sewage lagoon and East 68th Avenue, the dominate vegetation type is spruce/moss forest. It supports an over story of black spruce with an under story of sphagnum moss and sedges.

H. Visual Resources

Scenic quality is best described as the overall impression retained after traveling through or being within an area of land. The visual resources on the CT can be divided into two categories of scenic quality. The area surrounding the administrative compound, which includes administrative offices and warehouse buildings, is Class C scenic quality and the remaining, less developed area, is Class B.

The visual resource scenic quality of the area near the offices and warehouse contains features fairly common to the physiographic area, in this case the Anchorage bowl. This area is managed under a Class III Objective; to partially retain the existing character of the landscape. The level of change to the characteristic landscape could be moderate.

The views to the east of the offices and warehouse are dominated by the Chugach Mountains. This area is relatively open to the north and east to accommodate administrative uses. Although this area is clearly developed, it also promotes some of the best viewing of the Chugach Mountains. There are homes viewable from the area, but they are far away and non-contrasting. The remaining less developed portions of the CT area contains a combination of outstanding features and some features fairly common to the region. This area is managed under a Class II objective; to retain the existing character of the landscape. The level of change to the characteristic landscape should be low.

I. Wildlife

The CT provides habitat for most of the terrestrial animal species found in southcentral Alaska. Moose are common yearlong and use the CT for calving in the spring, rutting and wintering habitat. Black bear, brown bear and wolf use the CT and move from higher elevations during seasonal changes or in search of food sources such as berries, salmon, moose calves and winter kill carrion. Snowshoe hares are abundant and support a small number of lynx whose population cycles with the hare population. Coyotes are seen or heard often and breed on the CT and surrounding area. Other animals that live and breed on the CT include beaver, red fox, porcupine, red squirrel, wood frog and several species of microtine rodents.

There are 20 bird species that are year-round residents, and an additional 21 migrant species that breed here. Three species of owl breed in the CT's forest habitats, and bald eagles nest in adjacent areas and use the CT's prey base to raise young. Thirty-three species of resident and migrant land birds have been documented using the CT's forest and shrub habitats during fall migration through studies using mist netting and bird banding. The olive-sided flycatcher, gray-cheeked thrush, Townsend's warbler and blackpoll warbler move through the CT during fall migration and are included on the State of Alaska's list for Species of Special Concern.

The CT provides cover habitat and food for many wildlife species. It serves as a buffer and migration corridor, particularly for moose and bear, between urban areas and Chugach State Park reducing wildlife conflicts

with people. The CT is a recognized watchable wildlife site, and is a key part of the “Living with Wildlife in Anchorage” cooperative planning effort.

IV. ENVIRONMENTAL CONSEQUENCES

A. Impacts Common to all Alternatives, Excluding the No Action Alternative

1. Critical Elements

a. Air Quality

Relocation and construction of the CTF entrance road would increase the level of dust and other particulates for a short period during earth moving activities and gravel placement. Exhaust from equipment used to construct the road would increase carbon monoxide and other combustion emissions. Additional petroleum based emissions would be given off by the hot asphalt when paving the road.

Construction of the structures would increase the number of vehicles traveling to the site and heavy equipment working on site. Exhaust from equipment would increase carbon monoxide and other particulates. Dust would increase from earth moving activities and would be higher during dry periods. Mud from on site would fall off construction vehicles as they exit the CTF and increase dust on the road during dry periods if no dust abatement measures are utilized. Because of the remoteness of the site, dust and exhaust particulates would not be noticeable in any residential areas off site. Total air pollutant emissions from these actions would not reach a level requiring any form of air quality permit or cause nonattainment of Anchorage air quality standards. Impacts from relocation of the utilities, (water, sewer and power) to air quality would be similar to those from relocating the road.

b. Cultural Resources

There are no known prehistoric cultural resources on the CTF. Most construction activity would occur on previously disturbed sites and any prehistoric sites would already have been disturbed. Previously undisturbed areas have been inventoried and no prehistoric cultural resources were found.

Historic resources from the World War II era are scattered throughout the CT. Like prehistoric resources, any historic sites on disturbed areas of the CT would have been destroyed or obscured by site development that occurred over the last 40 years. Previously undisturbed areas have

been inventoried and no historic cultural resources were found. It is possible, though not likely, that during excavation of areas appearing undisturbed that buried historic resources could be found.

c. Invasive, Non-Native Species

Invasive, non-native plant species are known to occur on site and throughout the Anchorage Bowl. As mature native vegetation is removed, the potential for an increase in invasive species would be higher. Invasive plants would likely colonize areas along new utility lines, roads and around building sites. Construction equipment brought from other sites may transport seeds from those sites. Fill materials or topsoil brought on site would have a high potential to bring in seeds from invasive or undesirable plant species.

d. Subsistence

Developments on the CTF would not measurably restrict subsistence uses, decrease the abundance of subsistence resources, alter the distribution of subsistence resources, or limit subsistence user access from currently existing conditions. There are no known users of subsistence resources on the CT.

e. Water Quality (Surface/Ground)

There would be an increase in surface water runoff from development of an alternate entrance road. Runoff waters would have higher levels of silt and suspended solids. Soils along the proposed alternate entrance road are hydric and some pooling or slow infiltration would be likely. Some contaminants falling from vehicles traveling on the road would be present but in very small quantities. Surface water runoff from the road would not reach any flowing streams.

Construction of a new administration building, parking lot and shop building would increase surface water runoff. During construction and before landscaping and rehabilitation, runoff waters would contain higher levels of silt. The CTF administrative area is located on well drained soils and no drainage off site would occur. Silt and suspended solids would be filtered out before reaching

ground water. Some contaminants would fall from vehicles on parking lots but in small quantities. Surface water drainage from developed areas would infiltrate into the ground before reaching any flowing surface water connecting with Campbell Creek basin streams.

f. Wastes (Hazardous/Solid)

It is possible that during construction activities, a spill of diesel fuel or other petroleum product could occur on site. Depending on the size of any spill, there would be the potential for contamination of soil, surface water and ground water if proper containment and abatement procedures were not implemented.

Removal of the existing shop and other structures may disclose the existence of unknown lead based paint, asbestos or fuel contamination from prior activities on site. If discovered, failure to follow proper abatement procedures would increase the potential for a release to the environment.

Ongoing routine activities on site would continue as they have in the past. The shop and fuel facility generate a small amount of hazardous waste and the warehouse stores and handles materials that are classified as hazardous. Procedures and safeguards are in place to keep these activities in compliance with laws and regulations.

g. Wetlands/Riparian Zones

Construction of an alternate access road would impact 21,500 to 31,500 square feet of black spruce bog/spruce moss forest wetland depending on whether the Concept A or B road was constructed. This area would be cleared of all vegetation, mostly large black spruce. The cleared area would be filled with a gravel base and paved. Development of the road would allow rehabilitation of the existing entrance road up to the point where the new and old roads intersected.

Fill placed for the road would potentially restrict surface flow and cause some pooling of surface water. There is little, if any, surface flow presently which indicates the likelihood of restriction of surface water flow is low. The

relocation of the road would not restrict movement of subsurface ground water.

Any wetlands near the western edge of the sewage lagoon which were developed years ago would be rehabilitated to native vegetation after municipal sewer service was hooked up. This area is a transition between upland and wetland and rehabilitation of a small area to wetland would be possible.

2. Noise

The development of an alternative entrance road would require the area be cleared utilizing chain saws. Noise from the saws and removal of slash would be short term lasting less than two weeks. Construction of the road involving equipment and trucks would occur over a longer period, intermittently over two to three months. Noise would be increased in the immediate area, but because of distance to neighborhoods noise levels beyond the site would be low.

Construction could be spread over many years between FY07 and FY10. Depending on the phase of construction, noise levels would vary from zero to moderate. Employees and nearby recreation users would be the most impacted. Because of the distance of most construction from the existing buildings, noise levels would be low inside the offices. Construction noise would detract from the quietness most recreation users seek when on the CT trails. Construction noise levels in the surrounding neighborhoods would be slightly above background, mitigated by distance and the sound reducing effect of vegetation. After construction, noise from the operations conducted at the CTF would remain similar to existing levels.

3. Recreation

During construction, recreation users that have been walking through the administrative area would be rerouted away from construction areas. There would be a loss of approximately 75 feet of trail on Moose Track trail on Concept B alternate access road and no loss of trail mileage on Concept A alternate access road. The rerouting of utilities and alternate road development would require closure of the Smokejumper Trailhead parking lot for up to three months. Recreation users that utilize that parking lot would be displaced to other trailhead locations.

The Proposed Action and development alternatives would eliminate the majority of the Smoke Jumper Loop Trail. The trail is not shown as a part of the CT trails and receives very little public use.

The industrial portion of the CTF, shops and warehouse, would be fenced for safety and security reasons excluding any casual recreation use. Construction and normal CTF operations would only limit recreation opportunities slightly since in the management plan for the CTF, the administrative area is not open to recreation use.

4. Socio-economics

There would be a small and short term positive impact to Anchorage, related primarily to jobs and purchases associated with construction. Overall direct contribution to the area economy would be less than $25 million over the phased construction period. There could be a small increase in BLM employment over the long term but the estimated increase would contribute less than an additional one million dollars annually to the Anchorage economy.

5. Soils

Topsoil would be removed on areas where construction occurred and either hauled off or mixed with other soil horizons. Productivity would be lost and the rehabilitation potential of areas where topsoil was removed would decrease.

6 Traffic

There would be an increase in traffic on both East 68th Avenue and Abbott Loop Road during construction. Approximately 3,000 vehicles per day travel Abbott Loop Road between East 68th Avenue and East 84th Avenue. Construction of the alternate access road would generate the greatest short term construction traffic increase when gravel fill materials were hauled in. This would last for several days and could require 100 to 200 truck trips.

Construction of the development alternatives would increase traffic periodically as the materials for each phase of construction were hauled in. During construction, vehicle traffic would increase as construction workers travel to and from the site. The estimated increase would be less than 150 vehicle trips per day but would

vary from day to day. Once construction was complete, the estimated long term increase in BLM related traffic would be 25 to 50 vehicle trips per day.

7. Vegetation

The development of the alternate access road would require the removal of 3,500 square feet of spruce birch forest and 21,500 square feet of black spruce bog/spruce moss forest for the Concept A road. The Concept B road would require removal of 8,500 square feet of spruce birch forest and 31,500 square feet of black spruce bog/spruce moss forest. This loss would be long term unless compensatory mitigation was provided elsewhere on the site.

The development of the administrative areas would require the removal from approximately 105,000 to 217,500 square feet of spruce birch forest for placement of buildings and parking areas. The proposals include mitigation of these sites by restoring approximately 113,000 to 218,500 square feet of cleared land off site to forest. To the degree feasible, existing vegetation in cleared areas would be transplanted to the mitigation areas. Mitigation areas include the sewage treatment site, old aircraft parking pads, and areas near the helipads. Mitigation areas would require 20 to 40 years to attain a forest structure approaching that on the existing sites.

Snow removal and storage would be detrimental to vegetation, particularly if heavy snows required snow to be pushed into undisturbed areas surrounding parking lots. Large trees would be lost as some would likely be pushed over or broken off. Rehabilitated areas and new landscaped areas would be similarly impacted if snow was pushed into these areas.

8. Visual Resources

Clearing of the alternate access road would create a long narrow lane through a dense black spruce forest. The lane would only be obvious when viewed from a vantage point at the end of East 68th Avenue. The general visual features are fairly common to South Anchorage and the change would not be very noticeable.

The major change to the visual resource would be the clearing of 105,000 to 217,500 square feet of spruce birch forest for placement of buildings and parking areas. The clearing would change the character of the sites from forest to a more open developed site. It would open up the views of the Chugach Mountains to the east. Because of the distant views and the building designed to blend into the sites, the existing character of the landscape would be at least partially retained.

9. Wildlife

The development of the alternate access road would result in the loss of 21,500 to 31,500 square feet of black spruce bog/spruce moss forest habitat and 3,500 to 8,500 square feet of spruce birch forest habitat. The black spruce bog has relatively low value for large mammal species, other than for cover, as there is little forage available in dense stands. There would be a loss of nesting habitat and cover for some resident and migratory bird species. The spruce birch forest habitat has higher value for large mammal and bird species both for cover and forage. A part of the loss would be both short and long term as compensatory habitat restoration on the replaced section of the existing access road would be on an upland vegetation site. Mitigation of the sewage lagoons would provide compensatory wetland habitat but of a different type than the black spruce/spruce moss forest habitat.

On the developed administration sites, there would be a loss of 105,000 to 217,500 square feet of spruce birch forest habitat. Wildlife use, particularly by birds and small mammals would be mostly eliminated at site clearing. There would be a loss of forage and some displacement of large mammals during construction because of the noise and the increased level of activity. Habitat fragmentation would not be a problem at the site of the new administration building since there are large surrounding areas of similar habitat and the development of the site would not create a long linear barrier.

Fencing of the industrial portion of the administration site would not create a wildlife movement barrier, since the fence only includes the buildings. The present buildings already act as a minor barrier to large mammal movement. There would be a low possibility of animals colliding or becoming entangled with the fence and causing injuries.

On past projects, there have been bear feeding problems because of left over lunches or discarded food. Some bears in South Anchorage have become habituated to human food and unless measures are taken, problems with bears could arise during construction.

Many of the negative effects of habitat loss would be offset by the restoration of 113,000 to 218,500 square feet of presently cleared areas to a similar spruce birch forest habitat. The restored areas would take up to 40 years to mature to the level where the habitat values in the restored areas would be similar to the lost habitat. Restoration may be difficult without moose proofing actions to prevent moose from eating transplanted and sprouting trees and shrubs on the rehabilitated areas. Because of the large increase in edge effect and a change in plant composition, the restored areas may eventually become more productive overall than the habitat lost to development.

The planned mitigation of cleared areas would not be equally beneficial to all wildlife, particularly some birds, small mammals and insects that favor an open non-forested habitat. Rehabilitation of the sewage lagoons, unless some open water and wetland was included, would decrease the availability of a small amount of habitat for waterfowl and a water source for small birds.

B. Impacts of the Proposed Action - Meadows Site Plan

1. Critical Elements

Impacts to the critical elements were analyzed in Section IV.A. Impacts Common to all Alternatives, Excluding the No Action Alternative. There are no additional impacts to the critical elements.

Impacts common to non-critical elements for all development actions were analyzed in Section IV.A. Impacts Common to all Alternatives, Excluding the No Action Alternative. Additional impacts exclusive to the Meadows Site Plan are analyzed below.

2. Vegetation

The development of the administrative area would require the removal of approximately 217,500 square feet of spruce birch forest for placement of buildings and parking areas. The proposal includes mitigation of this removal by restoring approximately 218,500 square feet of cleared land to forest.

3. Visual Resources
The change to the visual resource would be the clearing of 217,500 square feet of spruce birch forest for placement of buildings and parking areas.

4. Wildlife
There would be a loss of 217,500 square feet of spruce birch forest habitat. Habitat loss would be offset by the restoration of 218,500 square feet of presently cleared areas to a similar spruce birch forest habitat.

C. Impacts of Alternative #1 - No Action

1. Critical Elements

a. Air Quality
Because of the remoteness of the site, dust and exhaust particulates from daily operations would not be noticeable in any residential areas off site. Total air pollutant emissions from normal operations would not reach a level requiring any form of air quality permit or cause nonattainment of Anchorage air quality standards.

b. Cultural Resources
There are no known prehistoric cultural resources on the CTF. Historic resources from the World War II era are scattered throughout the CT. Like prehistoric resources, any historic sites on disturbed areas of the CTF would have been destroyed or obscured by site development that occurred the last 40 years. It is possible, though not likely, during routine maintenance activities that undisturbed buried prehistoric or historic resources could be found.

c. Invasive, Non-Native Species
Invasive, non-native plant species are known to occur on site and throughout the Anchorage Bowl. Without control measures, invasive plants would likely colonize areas around the buildings and parking areas, especially where routine maintenance activities occur. Traffic to the site or any topsoil brought on site would have a potential to bring in seeds from invasive or undesirable plant species.

d. Subsistence
Operations on the CTF would not measurably restrict subsistence uses, decrease the abundance of subsistence

resources, alter the distribution of subsistence resources, or limit federally qualified subsistence user access from currently existing conditions. There are no known or documented users of subsistence resources on the CT.

e. Water Quality (Surface/Ground)
The CTF administrative area is located on well drained soils and no drainage off site would occur. Silt and suspended solids would be filtered out before reaching ground water. Some contaminants would fall from vehicles on parking lots but in small quantities. Surface water drainage from developed areas would infiltrate into the ground before reaching any flowing surface water connecting with Campbell Creek basin streams.

f. Wastes (Hazardous/Solid)
Ongoing routine activities on site would continue as they have in the past. The shop and fuel facility generate a small amount of hazardous waste and the warehouse stores and handles materials that are classified as hazardous. Procedures and safeguards are in place to keep these activities in compliance with laws and regulations.

g. Wetlands/Riparian Zones
The western edge of the sewage lagoon is near the transition between upland and wetland. During approximately 10 percent of the year, there is enough discharge to flow into the lower lagoon. Treated water filtering out of the lower lagoon would continue to infiltrate into the adjacent wetlands.

2. Noise
Noise from the operations conducted at the CTF would remain similar to existing levels. Noise would be increased during periods when upgrading or maintenance work was conducted. Noise would be greatest in the immediate area but because of distance to neighborhoods, noise levels beyond the site would be low.

3. Recreation
Routine maintenance work and normal CTF operations would only limit recreation opportunities slightly, since recreation activities occur outside of the administrative area. Security and safety reasons would restrict recreation from the administrative area itself

and as detailed in the CTF management plan; the administrative area is not open to recreation use.

4. Socio-economics
There would be a continued positive impact to Anchorage, related primarily to jobs and purchases for goods and services. There likely would be a small increase in BLM employment over the long term, but the increase would only contribute a few hundred thousand dollars annually to the Anchorage economy.

5. Soils
Some disturbance of soil structure would occur during routine trenching or other maintenance work.

6. Traffic
There would be little change in vehicle traffic. A slight increase would occur as employee numbers changed but would both increase and decrease depending on the number of vacant positions and any project related work. During periods when increased upgrading or maintenance work was conducted, traffic would increase for short periods. Overall, traffic would not increase more than 10 to 15 percent during the next several years.

7. Vegetation
Normal CTF operations would cause little impact to existing vegetation. Some trees would be removed if they became hazard trees or if necessary to maintain defensible space around buildings. Areas around the helipads, roads and parking lots would continue to be trimmed to maintain low vegetation for aesthetic, safety and security reasons.

8. Visual Resources
The area surrounding the administrative compound, which includes administrative offices and warehouse buildings, would remain Class C scenic quality. It would be managed under Class III Objectives; to partially retain the existing character of the landscape. Some growth of trees on the perimeter and low vegetation would change views slightly but would not change the scenic quality rating.

9. Wildlife
The loss of approximately 14 acres of spruce birch forest habitat for site development occurred over the last 40 years. Continued

operation would not increase habitat loss. Some species would benefit by maintaining the current habitat, for example geese grazing grass areas around the helipads and nesting near the sewage lagoon. Food placed in trash receptacles, if not properly secured, would create a potential for bear problems.

D. Impacts of Alternative #2 - Gateway Site Plan

1. Critical Elements

Impacts to the critical elements were analyzed in Section IV.A. Impacts Common to all Alternatives, Excluding the No Action Alternative. There are no additional impacts to the critical elements.

Impacts common to non-critical elements for all development actions were analyzed in Section IV.A. Impacts Common to all Alternatives, Excluding the No Action Alternative. Additional impacts exclusive to the Gateway Site Plan are analyzed below.

2. Vegetation

The development of the administrative area would require the removal of approximately 198,500 square feet of spruce birch forest for placement of buildings and parking areas. The proposal includes mitigation of this removal by restoring approximately 200,000 square feet of cleared land to forest.

3. Visual Resources

The change to the visual resource would be the clearing of approximately 198,500 square feet of spruce birch forest for placement of buildings and parking areas. This would be a new location away from the existing facilities so the change would be more obvious, changing from a Class B to a Class C scenic quality. Because of the surrounding woods, the site would not be in view until the area was entered.

4. Wildlife

There would be a loss of approximately 198,500 square feet of spruce birch forest habitat. Habitat loss would be offset by the restoration of approximately 200,000 square feet of presently cleared areas to a similar spruce birch forest habitat.

E. Impacts of Alternative #3 - Courtyard Site Plan

1. Critical Elements

Impacts to the critical elements were analyzed in Section IV.A. Impacts Common to all Alternatives, Excluding the No Action Alternative. There are no additional impacts to the critical elements.

Impacts common to non-critical elements for all development actions were analyzed in Section IV.A. Impacts Common to all Alternatives, Excluding the No Action Alternative. Additional impacts exclusive to the Courtyard Site Plan are analyzed below.

2. Vegetation

The development of the administrative area would require the removal of approximately 105,000 square feet of spruce birch forest for placement of buildings and parking areas. The proposal includes mitigation of this removal by restoring approximately 113,000 square feet of cleared land to forest.

3. Visual Resources

The change to the visual resource would be the clearing of approximately 105,000 square feet of spruce birch forest for placement of buildings and parking areas. This plan would cause the least impact to visual resources. It would remove the smallest amount of vegetation and would be the most closely associated (physical location) with the existing facilities.

4. Wildlife

There would be a loss of approximately 105,000 square feet of spruce birch forest habitat. Habitat loss would be offset by the restoration of approximately 113,000 square feet of presently cleared areas to a similar spruce birch forest habitat. This plan would have the least short term impact because of the smaller amount of habitat removed and restored. Long term impacts would be similar for all options since there would be no net loss from any of the plans.

V. MITIGATION MEASURES, CUMMULATIVE AND RESIDUAL IMPACTS

The actions for all three development plans are similar and differ primarily in the site location and the amount of surface area disturbed by the development. Mitigation measures are therefore similar and would differ mostly in scope, not in the measure taken.

A. Mitigation Common to the Proposed Action and Development Alternatives

1. Critical Elements

a. Air Quality

Dust emission should be monitored once vegetation is cleared for new developments. If dust levels become high enough to restrict visibility or cause discomfort to personnel on site, watering of dry areas should be initiated. Watering should continue until conditions improve and dust levels are low. If paved access roads become dusty from tracked mud or spilled dirt, the roads should be cleaned with street cleaning equipment.

b. Cultural Resources

Standard cultural stipulations are adequate. No mitigation measures are recommended.

c. Invasive, Non-Native Species

Clearing and soil disturbance should be minimized where practicable to limit opportunities for invasive, non-native species to become established. Topsoil or fill material brought on site should be free of invasive, non-native species. Reclamation should begin as soon as possible and only native species and seeds certified free of noxious weeds should be used. During and following construction, disturbed areas should be monitored for invasive, non-native species and eradicated by hand or mechanical means.

d. Subsistence

No mitigation measures are recommended.

e. Water Quality (Surface/Ground)

If surface runoff from disturbed areas appears possible, silt traps should be placed in areas to prevent runoff of water with high silt loads. Biofiltration swales should be

designed into the site to filter out suspended solids and prevent them from reaching ground water. Standard stipulations for spill prevention and clean up are adequate to protect ground water.

f. Wastes (Hazardous/Solid)
If hazardous materials are discovered or spilled, standard abatement requirements and stipulations for the CTF are adequate to protect the environment against contamination. No mitigation measures are recommended.

g. Wetlands/Riparian Zones
The flow of surface and shallow ground water should be provided for under the access road if it is developed. Culverts or porous materials that provide pathways for water flow and prevent any ponding should be designed into the road bed.

Reclamation of the sewage lagoon area should retain the existing ponds after the facilities and liners have been removed rather than be filled with soil. Ground water may create a small pond and be maintained at a level where wetland type vegetation can be restored, particularly in the lower pond. This would also compensate for most of the square footage loss of the spruce/moss forest if the entrance road was relocated.

2. Noise
Equipment operated on site should be equipped with functioning mufflers and other standard noise reduction devises. Hours of construction should be between 6:00 a.m. and 10:00 p.m. to reduce noise to surrounding residential areas and for recreation users on site.

3. Recreation
Recreation users should be informed of the construction activities by signing and through notices to the Campbell Tract/Far North Bicentennial Park user group and other user groups. Reasonable alternative routes for passage of recreation users should be provided when trails or parking areas are impacted.

4. Socio-economics
No mitigation measures are recommended.

5. Soils

On undisturbed areas that are planned for vegetation clearing, topsoil should be removed to a depth of 15 to 18 inches and stockpiled. Stockpiled topsoil should be used to rehabilitate cleared areas or the mitigation areas depicted on the site figures.

Topsoil should be brought in to supplement stored topsoil and placed on the proposed mitigation areas where inadequate depths of soil exist to support vegetation growth. Soil brought in should be free of weeds and high quality to promote plant growth.

6. Traffic

Signs should be placed at strategic locations to provide for the safety of vehicle occupants traveling on the CT. During periods of heavy truck traffic, flag persons should be provided as necessary.

7. Vegetation

If the entrance road was relocated, the replaced portion of the entrance road should be rehabilitated to native vegetation. The replaced section of road would have buried utilities in the barrow area, but areas outside the utility corridors should be rehabilitated utilizing tree species and lower shrub and herbaceous plants. This would compensate for most of the vegetation square footage lost for the relocated entrance road but would be upland rather than wetland.

Although the Proposed Action and development alternatives provide for an equivalent area of vegetation restoration, a vegetation mitigation plan with the specific details should be developed prior to construction. The plan should include provisions for the removal of vegetation from the areas planned for clearing to the identified mitigation areas. Transplanting should include trees up to 10 to 15 feet in height. The larger transplanted vegetation should be supplemented by transplanting small shrubs, herbaceous plants and grass species that are desirable for wildlife species. Any seeding should also favor plant species that have higher value for wildlife. Seeding and transplanted vegetation should only include weed free and native species. Fencing of rehabilitated areas or protection of individual trees should be required to prevent moose browsing during vegetation establishment.

8. Visual Resources

Landscaping should include screening vegetation planted around buildings and ware yards to improve visual appearance.

9. Wildlife

The impact of the loss of nesting bird habitat should be decreased by allowing vegetation clearing activities to occur only from July 15 to April 1, before and after nesting activity. The bird habitat would still be lost until replaced by the planned vegetation mitigation, but the current year's nesting and recruitment would be saved.

Habitat mitigation should favor transplanting or planting plant species that have greater value for wildlife, such as aspen, cottonwood or willows, and berry or seed producing species. Rehabilitated areas should be protected by fencing or other means to prevent damage from moose until plants become established and of a size able to withstand browsing. Undesirable plant species such as alder should be mechanically removed from rehabilitated areas and maintained as a minor component of the plant community.

During construction, bear proof trash containers should be placed near work areas and all waste food deposited in them. Construction employees should be made aware of the requirement not to leave food around and to dispose of waste food properly.

B. Residual Impacts

If the entrance road is realigned with East 68th Avenue, there would be a permanent loss of from approximately 21,500 to 31,500 square feet (.5 to .75 acres) of black spruce bog/spruce moss forest wetlands designated as Class A wetlands in the MOA wetlands plan. There are currently just over 4,000 acres of Class A wetland in the MOA, although most would be higher value than the relatively low value black spruce forest type. Most of this amount of loss would be compensated for by restoring the portions of the upper and lower sewage lagoon area to higher value wetland.

The footprint occupied by the administrative site would be changed permanently. Soil structure would be permanently disturbed on those areas where development occurred. The loss of areas of undisturbed soil and vegetation increases every year in Anchorage. The CTF development would provide an incremental increase of almost five acres.

Removal of upland vegetation for site clearing would be compensated by restoration of cleared areas near the administrative facility back to a spruce birch upland vegetation type. The amount of removal and restoration would vary depending on the particular site plan. Cumulatively there would be no net loss of the vegetation type but the structure of the forest would change. It would take from 20 to 40 years to obtain a comparable structure on the restored areas. The cumulative change would be small, but would add slightly to the loss of mature spruce birch forest in the CT area that occurred when the MOA cleared and leveled approximately 25 acres of forest for recreation development on the adjacent FNBP.

Wildlife losses of birds and small mammals would be partially mitigated by the habitat restoration. Changes in edge effect and forest structure would favor some species more than others. Cumulatively, when compared to the Anchorage bowl, these changes would not be detectable. In the immediate area, the change would add only slightly to the recent approximately 25 acre upland forest habitat loss on FNBP. Area wide, there is a cumulative loss of habitat as development occurs and areas like the CT and FNBP become some of the last large blocks of land with limited development available to wildlife.

VI. CONSULTATION AND COORDINATION

A. Chronology of Public Participation

Open House Aug. 26, 2003 (6 to 8 p.m.)

- Article in the CT Leaf (550 mailing list)
- News Release to Anchorage Daily News and Anchorage Chronicle
- CTF Master Plan Website (activated mid-August of 2003; initial link from BLM-AK and AFO homepages)
- Display ad Anchorage Daily News
- Highlighted at the CT Users Group meeting

Open House Oct. 15, 2003 (6:30 to 8:30 p.m.)

- News release to Anchorage Daily News and Anchorage Chronicle
- Post card mailed to 550 plus
- Flyer E-mailed to the CT User Group
- Flyer E-mailed from MOA communications office
- Display ad Anchorage Daily News (ran 10/11/03)
- Display ad Anchorage Daily News (ran 10/093)
- News release posted to website
- Personal phone calls to concerned local residents (Clinton Hanson)

FNBP/CT Meeting Nov. 5, 2003 (6:20 to 8:00 p.m.)

- June Bailey and Clinton Hanson
- Presentation showing draft of site plans and building
- Question and answer period

B. List of Preparers

Donna Redding - Cultural
Mary Hanson - Environmental Coordinator
Richard Stephenson - Graphics
Clinton Hanson - Management Lead
Jake Schlapfer - Recreation/Visual
Jeff Denton - Subsistence/Wildlife
Bruce Seppi - Wildlife